United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Bureau Architecture Team Charter

December 12, 1999

Bureau Architecture Team

~ Business Needs Statement ~

The Bureau of Land Management (BLM) needs to have a process in place to assure that business processes (and information technology) are aligned with strategic goals, meet public expectations, support the needs of on-the-ground activities, and provide the best value to the taxpayers. Since the establishment of the BLM in 1946, work processes have been traditionally viewed in a vertical manner (*i.e.* strictly by program, or "stove-pipe") with an underlying assumption that little commonality exists across programs. The Bureau is also characterized as having a high degree of decentralization and local organizational autonomy, and a close affinity to very site-specific issues and projects.

A watershed event in BLM history occurred on October 21, 1976, with the passage of the Federal Land Policy and Management Act. This legislation—for the first time— established the policy of permanent retention of the public lands for multiple benefits, and established the BLM as a full multi-disciplinary natural resource management agency. For the past 20 + years, BLM has been gaining management experience and recognition in this field.

In addition, over the past 10 years, the BLM's budget has been relatively flat, thus causing us to find new ways of meeting our mission, while operating in a constrained budget environment. Attempts have been made over this time period to incorporate appropriate levels of information technology to the day-to-day operations of BLM. In virtually all cases, however, these attempts focused on a single program and excluded looking across the BLM for opportunities to consolidate like processes and yield a synergistic higher value to the agency as a whole. In general, this reflected a reality of technological limitations at that time.

Coupled with these recognitions of more responsibilities and public expectations, in an age of limited budget resources, is today's explosive growth of automation technology. This explosive growth—while exciting and providing a clear opportunity for BLM to make significant advances in meeting public and employee expectations—places us in a strategic quandary.

BLM's single largest automation project in the 1980s and 1990s was not accepted by the employees as a useful tool to assist them in their day-to-day management of the public lands. This has reenforced a widely held skepticism regarding the value of centrally developed and managed automated systems in the BLM.

So, the BLM is at a crossroads–do we repeat the past, or–as the National Performance Review mandates–adopt the best practices used elsewhere. In other places in both the federal and private sectors, there is a growing recognition that work processes must be reengineered looking across the agency (or company) in a horizontal view. Then–and only then–can today's automation technology be applied to gain significant efficiencies and benefits from it.

In July 1999, the BLM began its initial effort to develop an enterprise architecture that would include all BLM business processes and work functions. In parallel, a few months earlier, a similar, but more detailed, architecture effort had been started to define the same needs for the proposed LRIS (Land and Resource Information Systems) project. Although we have already seen some initial results from these efforts, in November 1999, we decided to merge and manage these architecture efforts as one project. The appropriate AD's and the BLM Information Technology Investment Board (ITIB) made this decision. A single architecture effort provides the greatest opportunities for success and for assuring that all of the BLM's technology investments become aligned with our work needs.

~ Purpose/Mission of the Architecture ~

BLM must assure that our business tools and information technology are:

- aligned with our strategic goals and business processes,
- meeting new and changing public demands,
- supporting the needs of on-the-ground activities, and
- providing the best value for both our employees and the taxpayers.

The BLM, like many other organizations in the Federal Government and in the private sector, now recognizes that we must manage our work processes looking across the whole agency in a horizontal view.

The "Bureau's Architecture" (BA) is designed to identify and document the BLM's business work processes and the information needs of these processes. This helps BLM management establish investment strategies for IT based on a comprehensive view of the BLM business needs for IT support and allows the BLM to direct its efforts into the areas of the greatest benefit.

The definition of the BA:

- is driven by business goals and processes,
- is a joint business/IRM project,
- will look across the entire spectrum of BLM's work (and build on what has been accomplished in our ABC effort and other work process analyses), and
- processes will be re-engineered before automation rather than after.

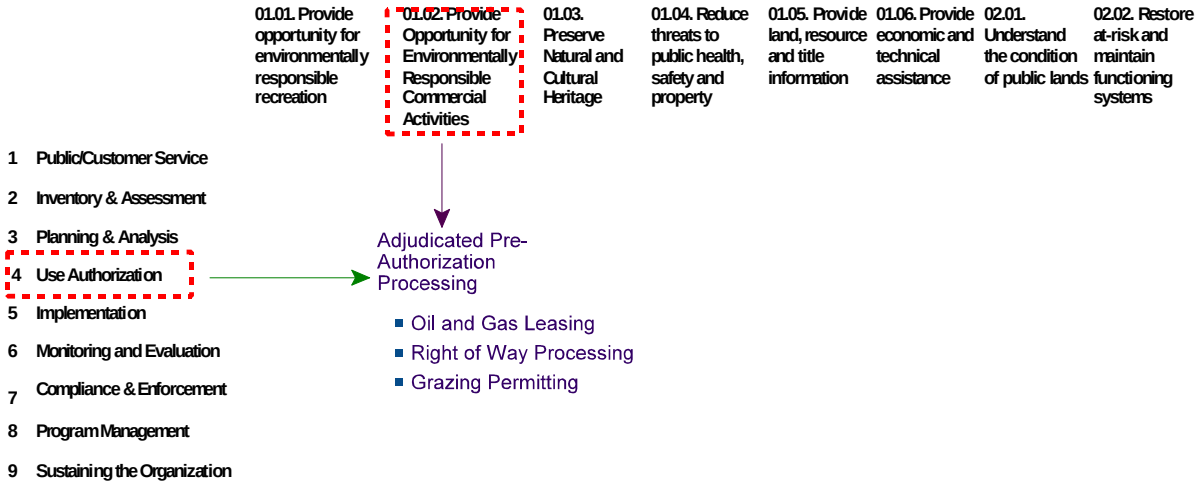
In order to gain the most comprehensive view of the BLM's "business" needs, we will integrate the BA design with the BLM's:

- Strategic Plan,
- Cost Management (ABC) efforts,
- Capital investment planning, and
- Work force planning.

~ Goals/Objectives ~

We need to look at automation tools from a comprehensive Bureauwide view and as a future investment. This will save the BLM time and money and help to assure that investments in technology and other tools will address real work needs of the Bureau.

As part of the BA, a comprehensive horizontal (cross-program) work process analysis is conducted, beginning with the nine high-level work processes (the left-most column in the below graphic) identified in the ABC matrix. We have illustrated one of the specific work processes (described below) as an example of how these relate back to the mission goal.



To define the future desired BA to be most effective as a framework to guide decisions, we need to reorient how we view that work is accomplished in BLM. Traditionally, BLM has assumed that work processes and program activities were the same thing, and that any one work activity had little commonality and sharing of information across programs, instead of viewing work as accomplished by generic processes with many common features and connections.

One aspect to this project concerns the end product of it. While we use the term “project” in this document, in actuality, an architecture is never completed. This is generally due to the recognition of new/changing business requirements/expectations and the rapid change in technology.

~ BA Methodology ~

The BLM's high-level and specific work processes will be diagramed and further analyzed to provide:

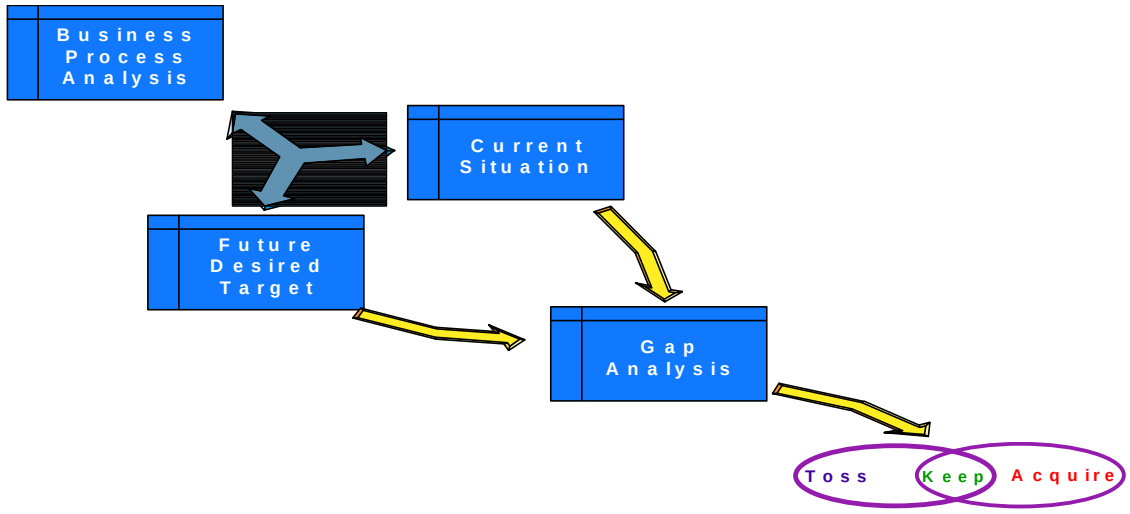
- a description of the BLM's current processes and information needs,
- a description of a future work processes and information needs,
- a "gap" analysis indicating the differences between our current situation and where we strategically wish to go and,
- an implementation priority matrix which will provide senior level managers with alternatives on how to achieve the desired future (including costs and pros and cons for each alternative).

To define the desired future BA, we will use a methodology based on the crosscutting business processes defined and validated through the BLM's recent Activity Based Costing/Management (ABC) analysis to document our various work processes and associated information (data) needs.

The Core Team will use whatever existing work is available from ABC, past automated system design projects, past process reengineering efforts, and other completed work definition analyses. The Core Team will also work with small teams of subject matter experts (SME) to define and diagram specific BLM work processes and information flows in a standard way. We will need about 15-20 SME teams to work with Core Team members and support contractor personnel for a maximum of two 1 week sessions during late January, February, or March 2000.

We will use software that allows us to capture, describe, diagram and link the work process steps and information flows obtained from the SME teams and existing documents to define the current and desired BA.

The following graphic summarizes the BA methodology at a high level:



˜ Project Steps/Deliverables ˜

Steps

To achieve the above, 10 basic steps are proposed as described here. For more detail, you are directed to the Project Schedule which is appended to this Charter.

Ø Plan the BLM Architecture effort
Ù Analyze BLM Business Strategy
Ú Diagram BLM Business Processes
Û Diagram BLM Business Information
Ü Assess current BLM Application Systems and Databases
Ý Assess Current BLM Technology
Þ Identify future BLM Information Systems and Databases
ß Identify future BLM Technology Infrastructure
à Analyze Gaps
á Layout BLM Implementation / Migration Plan

â BLM Architecture Administration (on-going)

Deliverables

By March 31, 2000, the BA will:

1. Document the current information architecture in BLM based on the BLM's business (program) work processes,
2. Develop a framework or high level view of the desired future ("target") business process architecture of the BLM, aligned with the information needs and IT support of those work processes;
3. Develop a set of architectural criteria for evaluating new IT project development proposals, project modification proposals, and overall IT investment opportunities;
4. In order to begin moving toward the desired future BA, provide recommended initial investments in:
    a. automated systems,
    b. applications,
    c. data bases, and
    d. infrastructure requirements.

After March 31, 2000, there will still be on-going activity to further define, refine, and manage the BA framework and the assurance of conformance with the framework in managing IT investments.

A decision will be made on or about April 1, 2000, on the need to initiate additional efforts to continue the definition of the BA and/or undertake additional BA development steps.

Such deliverables would include:

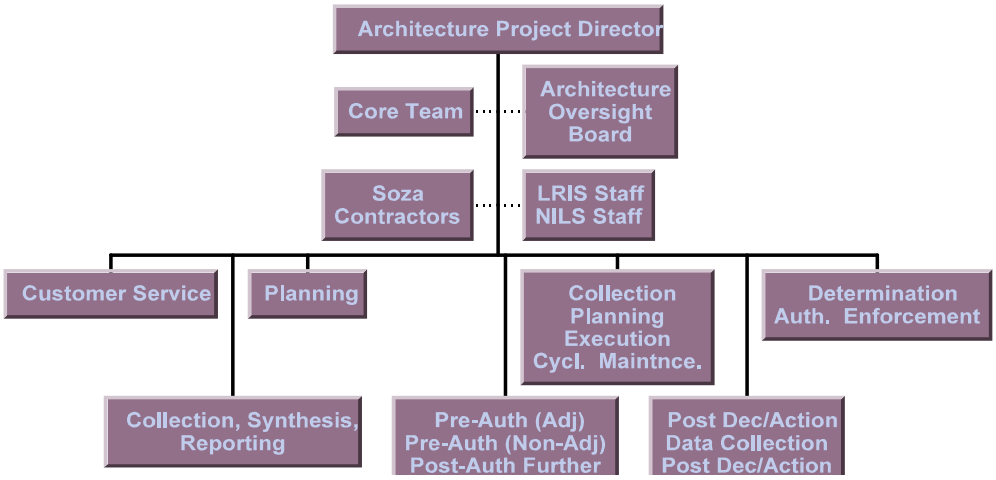
- Standards for Data Administration
- A description of the business rules that should be included in hardware and software standards.

At some point, the architecture will be sufficiently defined that it can be used to evaluate proposed projects. The emphasis will then shift from developing the architecture to using, enhancing, and updating the architecture. So, this is not a traditional "project" with a defined ending point, it is rather a road map to a journey.

~ BA Team Organization ~

The BA is under the executive oversight of the AD-IRM (Hord Tipton) and the BLM ITIB. Roger Hildebeidel (Special Assistant to the Director/Deputy Director) will lead the BA development effort as the Architecture Project Director, assisted by Joe Chesser as Co-Project Manager and a full-time Project Core Team. Field representation is included on the

Architecture Oversight Board that will review and validate the products coming from the BA definition.



The following table summarizes the roles and responsibilities of the various parts of the organization depicted in the above graphic.

Title	Name	Role/Comments
Architecture Project Director	Roger Hildebeidel, Special Assistant, WO-100	Overall BA development management including coordination with BLM leadership and program managers. BLM spokesperson for Architecture-related issues.
Architecture Oversight Board	*Board Members:* Roger Hildebeidel, Chair Scott MacPherson, Co-Chair Joe Chesser, Co-Project Manager Aden Seidlitz, Miles City FO, MT Don Ogaard, Worland FO, WY Jim Gegan, ESO Don Hinrichson, AKSO Bob DeViney, ORSO WO IRM Advisors (4) Chris North, AZSO (IRMAC) *Advisors:* Kit Muller, WO Joan Putman, WO John Broderick, WO Mike Garratt, NIRMC Chris Hopkins, NMSO Steve Wing, AZSO (Internet Team) Martin Terwilliger, FuGEN, Inc.	The Board provides business program oversight of all project strategic decisions and provides review, validation, and feedback at critical decision points of the process. Board will meet as necessary but this is not a full time assignment. It should be noted that the preponderance of the Board is field based.

Title	Name	Role/Comments
Core Team	Peter Ertman, WO-800 Renee Duval, WO-200 John Bebout, WO-300 Carolyne Ridge, WO-500 Duane Dippon, ORSO Clark Collins, WO-700 (part-time) John Broderick, WO-300 (Advisor) Project Director and Co-Manager (ex-officio)	Members of the core team assist the BA Director and Project Manager by providing facilitation of the analytical process as well as ensuring consistency of the results of the multi-team analysis. In addition, they will fully represent the enterprise-wide business process owners. Participants will be full time staff to project (December–March 2000).
Work Process Teams	As described on the above graphic, these are the nine teams shown immediately below the Core Team. Some combination or variation of these teams will be used as necessary to cover all BLM work processes.	These interdisciplinary (subject matter expert) teams will analyze the current work processes for commonalities in a structured process that has been used with success in both the private industry and the NILS and LRIS projects. The level of participation is projected to be two 1-week sessions during the period January–March 2000. *Note: Some members may participate on more than one team.*
NILS and LRIS Staffs	Leslie Cone, NILS Project Manager and Joe Chesser, LRIS Project Manager (both representing their entire staffs)	Staff from both projects will be made available to support the BA effort as necessary. Since both projects have used analytical techniques similar to those proposed, we plan to draw on their expertise and incorporate results of their previous analysis into the BA process as a whole. Project management and other administrative support to the entire project will be provided by LRIS staff.
SOZA contractors	Various	Provides the process and analytical expertise and operational support for successful completion of this project.
IRM Policy Group (WO-510)	Tim Foley (GM) + Staff	Provides the process and analytical support for this project, and integration with other IRM management policies.

~ Factors for Success/Barriers to Address ~

The over-riding factor is management commitment to providing the necessary resources to complete the Project. This includes having knowledgeable field office staff available for participation in the analytical phase as well as making the Core Team available on a full time basis during the first phase (January–March 2000).

The second factor is to restrain employee's natural tendency to proposing solutions before the analytical process is complete. Employees need to be mindful that any potential IT solutions are only one of the desired outcomes of this process. There are many "business" related benefits–outside of IRM–to be derived from this effort.

The third factor is the recognition of BLM's existing culture which can be described as highly decentralized and autonomous. In order to successfully implement the findings of the project, each State and program area must be willing to make compromises and agree to data standards and standard operating procedures for the good of the entire organization. Management commitment in this area is vital for the Bureau to realize the optimal benefits from the investment in this effort.

Allied with the above cultural issue, is the need for active management participation in identification of what data and information is necessary to make proper 'business' decisions. This may–sometimes–be in conflict with the perceptions of the particular field specialist.

The final factor to address in managing this project is the realization that this process will not yield immediate results. As with any strategic analysis, we are looking towards the future, not the present. It will provide few short-term answers to the questions of value received from our IRM investments or benefits to on-the-ground resource management actions. However, over the long-term, this effort will address both of these areas effectively and comprehensively.

~ Communications Points ~

In addition, we must effectively communicate the need for this effort and how and why it is different from previous efforts. Some ideas to consider are:

- Business (Program) need driven
  - A joint Business/IRM quality improvement process
  - Align IT with business, *not* business with IT
- Multiple points of review by Business Process owners
- Cross cutting look at business processes in horizontal dimension in addition to vertical
  - Rather than attempting to "grow" a vertical or "stove-pipe" application
- Analytical tools are better today
- Build on previous business analysis and buy-in
  - Much process analysis has been done in ABC and other efforts
- Legislation requires it
  - Clinger-Cohen
  - GAO, OMB, Hill
- Budget resources won't be available without it
- Provides accountability of technical IT decisions to Business Process owners
- Method of setting priorities and sequence of implementation of investments

- Leads to value added for our investment
- Uses same kind of decision making process as in other BLM decision processes, *e.g.* resource decisions
- Will assist in workforce planning issues
- Builds on other work that has been done
  - GPRA
  - Cost Management
  - Continuous Improvement
- This is a foundation applicable to entire Bureau

~ Project Plan ~

See attached Project detailed plan.

~ Approvals ~

Recommended by: _____

Roger Hildebeidel, Project Director

Concurred By: _____

Hord Tipton, CIO/AD-IRM

Approved by: _____

Tom Fry, Acting Director, BLM